



Article

Performative Inclusion and Diplomatic Emotion: Strategic Crisis Communication of Global Food Security Leaders on Social Media

Nor Azila Hasbullah¹, Ramesh Nair², Isma Noornisa Ismail^{3&4*}

¹Academy of Language Studies, Universiti Teknologi Mara, Shah Alam, Selangor, Malaysia

²Accounting Research Institute, Universiti Teknologi Mara, Shah Alam, Selangor, Malaysia

³Academy of Language Studies, Universiti Teknologi MARA Cawangan Pulau Pinang, Penang, Malaysia

⁴Pusat Kajian Bahasa dan Linguistik, Universiti Kebangsaan Malaysia, Selangor, Malaysia

SUBMISSION TRACK

Received: November 3, 2025

Final Revision: March 16, 2026

Accepted: March 20, 2026

Available Online: April 10, 2026

KEYWORDS

crisis communication, strategic communication, food security crisis, leadership rhetoric, social media

CORRESPONDENCE

*E-mail: isma182@uitm.edu.my

A B S T R A C T

Existing crisis communication frameworks are mostly orientated toward sheltering the reputation of an organization, thus limited insights are presented into how global leaders sustain legitimacy and solidarity during prolonged humanitarian crises, such as global food security issues. Addressing this gap, this study examines how six leaders from major international food security institutions (UN, FAO, WFP, IFAD, IFPRI, and USAID) employed rhetorical strategies on X (formerly Twitter) to address food security challenges during the COVID-19 pandemic (2020–2022). The study investigates five communication styles: inclusive language, thematic framing, emotive discourse, rhetorical markers, and temporal storytelling by using qualitative content analysis of 302 tweets and following the Restorative Rhetoric framework. Findings show that leaders used strategic, inclusive, and empathetic language, narrative coherence, and solution-oriented framing to gain support and visualize institutional legitimacy. This study proposes two novel concepts: performative inclusion, which refers to the strategic use of rhetoric by leaders to convey unity while concealing persistent power asymmetries, and diplomatic emotion, the bounded expression of empathy regulated by institutional authority. These insights extend strategic communication theory by showing how leaders balance authenticity, authority, and legitimacy in digital crisis contexts. The study offers guidance for institutions on designing communication strategies with a combination of empathy, participation, and credibility in managing global crises.

I. INTRODUCTION

The COVID-19 pandemic is a global crisis that not only extended beyond health issues, it disrupted economies, humanitarian systems, and food security across many parts of the world. Lockdowns restrained mobility and slowed the movement of goods, which caused interruptions in supply chains and deepened existing economic problems. As these disruptions unfolded, millions of people in both developed and developing countries faced increasing risks to food security

(Laborde et al., 2020; Mishra & Rampal, 2020). In Malaysia, the situation was worsened by rising food prices, supply shortages, and a strong dependence on imported food. These pressures exposed underlying structural inequalities, particularly among minimum wage earners whose income were largely spent on basic necessities (Chow, 2021). In this context, the crisis highlighted the importance of effective communication by global actors responsible for food governance. It also emphasized the need for communication approaches that move beyond organizational reputation management and

instead acknowledge the realities and humanitarian needs of affected communities.

Digital platforms are highly significant for the contemporary communication landscape, especially during crises. They allow faster message circulations, encourage interaction, and can reach wider audiences (Cheng, 2019; Papacharissi, 2015). Within these environments, social media platforms support rapid two-way communication between authorities and the public, hence, more effective spread of information about unfolding crises. This rendered social media platforms as key channels for crisis communication. (Triana et al., 2023; Perumal et al., 2024). Nevertheless, social media can intensify public scrutiny of leaders and amplify distrust via contestation, criticism, and misinformation. Online platforms such as X (formerly Twitter) have become spaces where ideological positions and political identities are negotiated through language and discourse practices (Elbourkhissi & Houssaini, 2025). These developments suggest that crisis communication on digital platforms is beyond information sharing. It is also rhetorical in nature, as language choices shape how global audiences interpret responsibility, authority, and collective action during crises. Elbourkhissi and Houssaini (2025) further note that social media discourse often frames language choices through broader ideological meanings, where particular languages may become associated with modernity, economic opportunity, or historical power relations.

Studies on crisis communication have traditionally focused on protecting organizational reputation and repairing public image. This focus can be seen in theories such as Benoit's Image Repair Theory (1995) and Coombs' Situational Crisis Communication Theory (2009). However, these approaches are less compatible to prolonged humanitarian crises that require empathy, solidarity, and moral authority (Ulmer et al., 2011). Crises like these often expand over long periods of time and involve multiple institutions and stakeholders. For this reason, they cannot be addressed effectively through strategies that concentrate mainly on organizational reputation repair, which was the central concern of many earlier crisis communication theories. In this context, scholars have begun to recognize the need for frameworks that acknowledge emotional complexity and encourage public participation in meaning-making

while still maintaining strategic clarity.

Crisis communication scholarship has gradually included more human-centred perspectives to address these limitations. One such approach is restorative rhetoric, proposed by Griffin Padgett and Allison (2010). This framework is particularly apt for complex crises because it emphasises emotional connection, community rebuilding, and long-term recovery. The model outlines five stages: Initial Reaction, Crisis Assessment, Issues of Blame, Healing and Forgiveness, and Corrective Action and Rebuilding. It distinguishes between strategic responses that aim to restore order and responses that recognise and validate the emotional experiences of affected communities. While restorative rhetoric was first applied to traditional media contexts, later studies have extended the framework to digital leadership in local crises. Examples include analyses of Boston Mayor Menino's communication following the Boston Marathon bombing (Williams et al., 2017) and Houston Mayor Turner's communication during Hurricane Harvey (Vera Burgos & Griffin Padgett, 2020). However, these studies mainly examine local disasters and national audiences. As a result, it remains unclear how restorative rhetoric functions in global crises where leaders must communicate with diverse international audiences through social media.

Being positioned at the intersection of humanitarian need, geopolitics, and public well-being has caused food governance to pose additional communicative challenges. Most existing scholarship on food systems focuses on structural aspects such as agricultural production (Adnan & Nordin, 2020; Rasul, 2021), supply chains (Devereux et al., 2020; Kaiser et al., 2021), nutrition (Eskandari et al., 2020), food safety (Subramaniam et al., 2023), and broader structural reforms (Bai et al., 2020; Fan et al., 2021). These studies provide valuable insight into the economic, policy, and structural dimensions of global food systems. They highlight challenges related to production capacity, supply disruptions, and governance reforms. However, they rarely examine how leaders communicate responsibility, solidarity, and public reassurance during crises. They also pay limited attention to how digital diplomacy shapes public trust in global food governance. As a result, the understanding of how global leaders use rhetorical communication styles to guide

public interpretation and sustain legitimacy during prolonged humanitarian crises is still limited.

Communication style is integral in crisis leadership as how leaders communicate during crises can influence public's understanding of events, and interprets responsibility. This study focuses on five communication styles that reflect linguistic and discursive strategies used to make sense of crises. These include inclusive language, emotive discourse, thematic framing, rhetorical markers, and temporal storytelling. Inclusive language helps create a sense of shared identity and can reduce the perceived distance between leaders and the public (Liu et al., 2022; Weiss et al., 2018). Emotive discourse allows leaders to acknowledge grief, fear, or uncertainty, which reinforces credibility by demonstrating empathy (Heath, 2004). Framing shapes how audiences interpret a crisis by emphasising particular aspects of the situation and directing attention toward certain problems or solutions (Entman, 1993). Rhetorical markers, which appear through recurring lexical patterns, help highlight key themes and reveal the tone and priorities of institutional communication. Temporal storytelling connects past events, present conditions, and future expectations, allowing leaders to construct a coherent narrative across different stages of a crisis (Habermas & Bluck, 2000; Weick, 1995). Although each of these strategies has been examined in earlier research, most studies focus on individual rhetorical elements within specific contexts such as political speeches, media framing, or organizational crisis messaging. As a result, there is still a limited understanding of how these rhetorical modes operate together in global humanitarian leadership during extended crises.

This study responds to these gaps by examining the public communications of six leaders representing major international food security organizations. These organizations include the UN (United Nations), FAO (Food and Agriculture Organization), WFP (World Food Programme), IFAD (International Fund for Agricultural Development), IFPRI (International Food Policy Research Institute), and USAID (United States Agency for International Development). The analysis draws on qualitative content analysis of 302 posts on X mapped across the five stages of restorative rhetoric. The study examines how leaders combined and sequenced different

rhetorical strategies in their communication. Particular attention is given to how these strategies helped leaders maintain authority, foster solidarity, and navigate global uncertainty during the crisis. In doing so, the study contributes to crisis communication theory by responding to the gaps identified in earlier scholarship. It brings together institutional authority, emotional diplomacy, and collective identity performance within an integrated analytical lens suited to global digital crises. By examining leadership discourse across multiple international food security institutions over an extended crisis period, the study provides one of the first empirical examinations of how rhetorical communication styles operate collectively in transnational digital crisis governance.

Despite extensive scholarship on food systems, supply chains, and food governance, relatively little attention has been given to how global food security leaders communicate during crises, particularly in digital environments. Existing crisis communication studies have mainly focused on organizational reputation management or local political leadership. As a result, there is still a limited understanding of how rhetorical communication styles operate collectively in global humanitarian governance during prolonged crises such as the COVID-19 pandemic. This gap highlights the need to examine how leaders governing global food security employ rhetorical strategies to sustain legitimacy, solidarity, and public trust in transnational digital contexts. Understanding these rhetorical dynamics becomes especially important in prolonged crises like COVID-19, where leadership communication must inform, reassure, and mobilize diverse global audiences at the same time. This article is guided by the following research questions:

RQ1: How did global food security leaders employ rhetorical communication styles on X during the COVID-19 crisis?

RQ2: In what ways did inclusive language, thematic framing, emotive discourse, rhetorical markers, and temporal storytelling contribute to sustaining legitimacy and trust?

RQ3: How do the dynamics of performative inclusion and diplomatic emotion explain the balance between institutional authority and authentic engagement in digital crisis communication?

By addressing these questions, the study

demonstrates how global food security leaders combine rhetorical strategies to maintain institutional authority while also expressing empathy in digital crisis communication. In doing so, it advances theoretical understanding of crisis rhetoric in international contexts and extends restorative rhetoric scholarship into the domain of global digital governance. The findings also offer practical insights for leaders seeking to communicate with empathy, clarity, and legitimacy during complex humanitarian crises.

II. METHODS

This study adopted a qualitative research design to explore how global leaders governing food security communicated during the COVID-19 crisis on X. Qualitative approaches are widely recognised as useful for examining social phenomena, particularly those involving human experiences, discourse, and institutional behaviour (Mohajan, 2018). Luo et al. (2015) also noted that qualitative analysis can be effective for identifying rhetorical trends and patterns in crisis-related communication.

The methodological procedures were informed by established qualitative content analysis guidelines outlined by Hsieh and Shannon (2005) and Schreier (2012). The qualitative study was designed using the Restorative Rhetoric Framework by Griffin-Padgett and Allison (2010), which is appropriate for prolonged, high-impact crises. This framework guided the identification of rhetorical shifts and styles throughout different

crisis stages over 34 months from 1 March 2020 to 31 December 2022. The rhetoric stages have been mapped to the COVID-19 pandemic period as shown in Table 1.

This framework was extended by integrating five rhetorical communication styles identified in the literature:

- Inclusive language
- Rhetorical word clouds
- Thematic framing
- Emotive discourse
- Storytelling and temporal narrative coherence

These communication styles were derived from prior research on political discourse, crisis communication, and narrative sensemaking. During the coding process, each post was carefully examined to identify linguistic and rhetorical features associated with these categories. Inclusive language was identified through the use of collective pronouns such as “we”, “our”, and “us.” Emotive discourse was coded when leaders expressed empathy, concern, or reassurance toward affected communities. Thematic framing was identified by examining how leaders emphasised particular crisis themes, including food access, supply disruptions, and global cooperation. Rhetorical markers were analysed through recurring lexical patterns that highlighted institutional priorities. Storytelling and temporal narrative coherence were coded when leaders connected past events, present conditions, and future recovery to construct a continuous narrative of the crisis.

Table 1. Proposed study period as per the stages in the Restorative Rhetoric Framework

Stage	Period	Phase	Justification	Example of Tweets
Stage 1	Mar 2020 – Sept 2020	Initial Reaction	Arrival of virus	Decisive collective action is needed now to ensure that this pandemic does not threaten food security and nutrition. (Lario, 21 April 2020)
Stage 2	Oct 2020 – Dec 2020	Crisis Assessment	Start of pandemic	Hunger is increasing in Sahel at a worrying pace. 6.6M people now face acute hunger. (Qu, 21 October 2020)
Stage 3	Jan 2021 – Dec 2021	Issues of Blame	Peak of pandemic	In my visit to West Africa, I heard from leaders & civil society about how the war in Ukraine is unleashing a food security crisis. (Guterres, 7 May 2021)
Stage 4	Jan 2022 – May 2022	Healing and Forgiveness	Crisis nearing stabilization	At the Global Food Security Meeting hosted by @SecBlinken, it was encouraging to see how the world has come together in this time of crisis. (Lario, 19 May 2022)
Stage 5	June 2022 – Dec 2022	Corrective Action and Rebuilding	Shift from pandemic to endemic	@USAID is providing additional funding to make fertilizer more affordable & accessible for Ghanaian farmers. (Power, 6 August 2022)

The study employed purposive sampling, selecting leaders according to specific inclusion criteria aligned with the research objectives. The sample consisted of six leaders. This number was determined by considering both theoretical saturation and practical constraints. A larger sample could capture greater diversity, but the intensive qualitative analysis required for each leader's discourse over 34 months necessitated a more focused sample. Previous studies examining leadership communication on social media have used similar sample sizes (Vera-Burgos & Griffin-Padgett, 2020; Williams et al., 2017). These studies demonstrate that in-depth qualitative analysis can produce meaningful insights even when the number of cases is relatively small. Ideally, a study of this nature would include all global leaders involved in food security governance. However, collecting data from every leader with an active social media presence is not feasible in practice. For this reason, the present study adopts a purposive sampling strategy to represent the broader population of leaders governing global food security.

The selection process involved three stages. First, a comprehensive list of international organizations involved in global food security governance was compiled. Second, the official X accounts of leaders from these organizations were identified and verified. Third, the inclusion criteria were applied systematically to narrow the sample. The criteria required that selected leaders (1) held a high-ranking position within a relevant organization, (2) maintained an official and active X account throughout the study period, and (3) regularly posted content related to food security, including the use of relevant hashtags. The selected leaders also represent diversity in organizational roles, titles, and gender, allowing the study to capture a broader perspective on leadership communication. The profiles of these leaders are presented in Table 2.

The online discourse of these leaders on social media reflects the strategic objectives and communication values of the institutions they represent. Although the accounts carry the names of individual leaders, previous research suggests that high-level institutional social media accounts often function as hybrid communicative spaces shaped by communication teams, advisors, and speechwriters (Johansson & Johansson, 2025). For this reason, the tweets analysed in this study are interpreted not as expressions of personal opinion but as representations of institutional voice communicated through leadership personas. The final sample includes major multilateral organizations (UN, FAO, WFP, IFAD), a leading research institution (IFPRI), and a major bilateral donor (USAID). Together, these organizations provide broad representation of the global food security governance landscape. Details of the six leaders, their positions, and the organizations they represent are shown in Table 2.

Tweets were retrieved from the official X accounts of the selected leaders using the platform's Advanced Search function. X is widely used by political and institutional leaders as a channel for direct public communication. For this reason, it has become an important source of data in studies of digital crisis communication and political discourse (Bruns & Burgess, 2011; Jungherr, 2016). The Advanced Search function allowed posts published within the defined study period to be identified in a systematic manner. Keyword filters were then applied to locate posts related to food security and the pandemic. These included terms such as "food security", "hunger", "food systems", "#FoodSecurity", and "#ZeroHunger", as well as pandemic-related keywords such as "COVID-19", "pandemic", and "crisis". Bruns and Burgess (2011) note that keyword-based retrieval is commonly used in social media research to identify topic-specific discourse within large datasets. Retweets,

Table 2. The selected leaders governing global food security profiles

No.	Name	Designation	Gender	Organization	Twitter account
1	Alvaro Lario	President	Male	IFAD	@IFADPresident
2	Antonio Guterres	Secretary-General	Male	UN	@antonioguterres
3	Cindy McCain	Executive Director	Female	WFP	@WFPChief
4	Johan Swinnen	Director General	Male	IFPRI	@Jo_Swinnen
5	Qu Dongyu	Director General	Male	FAO	@FAODG
6	Samantha Power	Administrator	Female	USAID	@PowerUSAID

replies, and posts that were not directly related to food security were excluded. This step ensured that the analysis focused only on original posts that reflected institutional messaging and leadership discourse. After the screening process, the final dataset consisted of 302 original tweets addressing food security issues during the COVID-19 crisis.

The coding process followed a systematic procedure guided by the analytical framework. A coding manual was first developed based on the five communication styles and the five stages of the Restorative Rhetoric Framework. The manual provided clear definitions for each category, together with examples and decision rules to support consistent coding. Each tweet was then examined and coded according to the presence of the identified rhetorical styles and their alignment with the relevant restorative rhetoric stage. These guidelines helped ensure that the rhetorical features identified in each post were interpreted in a consistent and transparent manner throughout the analysis.

The coding manual also included clear decision rules to distinguish between inclusive language, emotive discourse, and temporal narrative coherence when more than one rhetorical feature appeared in the same tweet. Inclusive language was operationalized through the use of first person plural pronouns such as “we”, “us”, and “our”, as well as phrases that invoked collective identity or shared responsibility. Emotive discourse was coded when tweets expressed empathy, concern, or reassurance toward affected communities.

Temporal narrative coherence was identified when tweets linked past events, present responses, and future recovery to form a continuous narrative of the crisis. Each tweet was therefore coded based on (1) the presence or absence of each communication style, (2) the restorative rhetoric stage it aligned with according to the time period and content, and (3) the specific linguistic features observed in the message.

A second coder independently reviewed a subset of the data using the coding manual and operational definitions to ensure the reliability of the coding categories. The second coder is an experienced language professional and a fellow Master’s graduate with expertise in academic editing, transcription, and translation. Her involvement helped provide an external perspective and strengthened the reliability of the analysis. She was first trained using the coding manual and a set of practice tweets that were not included in the final dataset. Training continued until the coder reached at least 80 percent agreement on the practice materials.

After the training phase, the second coder independently analysed 20 percent of the dataset (60 tweets). These tweets were selected across all five restorative rhetoric stages and across the six leaders to ensure representativeness. The inter-coder reliability analysis produced a Cohen’s Kappa score of 0.87 for restorative rhetoric, 0.94 for inclusive language, 0.81 for thematic framing, 0.88 for emotive discourse, and 0.83 for temporal narrative coherence. These scores indicate almost

Table 3. Operational definitions of rhetorical communication styles used in the coding process

Communication Style	Operational Indicators	Analytical Function
Inclusive language	Use of first-person plural pronouns (e.g., <i>we</i> , <i>us</i> , <i>our</i>) or phrases invoking collective identity, shared responsibility, or joint action	Signals collective agency and coalition-building between institutions and global publics
Emotive discourse	Words expressing empathy, concern, solidarity, hope, encouragement, or moral concern (e.g., <i>support</i> , <i>vulnerable</i> , <i>together</i> , <i>hope</i>)	Conveys empathy and emotional alignment with affected communities while maintaining institutional credibility
Thematic framing	Language highlighting specific crisis dimensions such as urgency, structural causes, inequality, recovery, or policy solutions	Directs audience interpretation of the crisis and emphasizes particular policy priorities
Rhetorical markers	Recurring lexical patterns and keywords identified through word-frequency analysis (e.g., <i>global</i> , <i>system</i> , <i>support</i> , <i>climate</i>)	Reinforces institutional priorities and emphasizes dominant themes in leadership messaging
Temporal storytelling	References connecting past events, present actions, and future outcomes (e.g., narratives describing what has happened, what is being done, and what will happen next)	Creates narrative continuity and situates crisis communication within a restorative timeline

Table 4. Inter-coder reliability analysis of rhetorical communication styles for restorative rhetoric

Stage	Structure	N (Units Tested)	fa (Agreement Value)	fc (50% of N)	Kappa Value
Stage 1	Defining the situation	54	49	27	0.81
	Expressing level of control over crisis	54	49	28	0.81
	Expressing concern and sorrow	54	48	27	0.78
Stage 2	Assessing the impact	22	22	13	1.00
	Promoting sense of being united	22	22	11	1.00
	Engaging communication with coping mechanism	22	20	12	0.90
Stage 3	Examining the root cause	72	69	39	0.92
	Identifying responsible party	72	67	43	0.85
	Responding to the issue	72	72	42	1.00
Stage 4	Assisting in helping community	65	61	42	0.83
	Providing moving forward actions	65	64	40	0.96
	Initiating rebuilding process	65	58	35	0.79
Stage 5	Restoring credibility	89	83	45	0.86
	Clarifying future preparation	89	86	70	0.83
	Institutionalizing resilience	89	83	64	0.76
Overall					0.87

Table 5. Inter-coder reliability analysis of rhetorical communication styles for other linguistic styles

Category	N (Units Tested)	fa (Agreement Value)	fc (50% of N)	Kappa Value
Inclusive Language	302	293	151	0.94
Thematic Framing	302	273	151	0.81
Emotive Discourse	302	284	151	0.88
Temporal Framing	302	276	151	0.83
Overall	302		151	0.87

Note: The expected agreement (fc) was calculated based on the actual distribution of coding decisions

perfect agreement between coders. The results of the inter-coder reliability analysis for restorative rhetoric and the linguistic styles are presented in Table 4 and Table 5.

Disagreements between coders mainly involved subtle distinctions in thematic framing. These differences were resolved through discussion and refinement of the coding criteria. Data management and analysis were conducted using NVivo 12, which supported systematic coding, cross-referencing, and pattern identification. Each tweet was imported as a separate item together with relevant metadata, including the date, the leader, and engagement metrics. The software’s query functions allowed the researchers to examine patterns across time periods, leaders, and communication styles. Word frequency analysis for the rhetorical word cloud was also conducted using NVivo’s text analysis tools. Common function words such as “the”, “and”, “of” were excluded from the analysis.

The researchers adopted a critical interpretive stance informed by crisis communication and discourse traditions that view institutional messaging as strategic rather than spontaneous. In analysing rhetorical patterns such as performative inclusion and diplomatic emotion, the researchers remained reflexively aware that institutional discourse may express genuine concern while also reinforcing authority and legitimacy. The analysis therefore examined how linguistic choices both reflect humanitarian engagement and reproduce power relations within global governance communication.

As the study analysed publicly available content from verified X accounts of international leaders, formal ethical approval was not required. Nevertheless, responsible data handling practices were followed throughout the research. All data were stored securely on password protected devices, and only aggregated findings are reported. This approach ensures that the analysis focuses on

institutional communication patterns rather than individual behaviour.

III. RESULTS AND DISCUSSION

The following sections present the findings according to the rhetorical communication styles observed in the dataset and interpreted in relation to the three research questions guiding this study. To address RQ1, the analysis examined how global food security leaders employed five rhetorical communication styles on X during the COVID-19 crisis: inclusive language, rhetorical markers, thematic framing, emotive discourse, and temporal storytelling. The findings show that these styles were used strategically across the stages of restorative rhetoric to guide public understanding and maintain institutional credibility.

Inclusive Language

Out of 302 food security-related tweets analysed during the study period, 130 contained inclusive markers such as the pronouns “we”, “our”, and “us”. The majority of these tweets appeared in Stage 4 (Healing and Forgiveness) and Stage 5 (Corrective Action and Rebuilding),

suggesting a shift from early crisis warnings toward messages that emphasised cooperation, reassurance, and long-term recovery. As the pandemic evolved into a prolonged global crisis, leaders increasingly used inclusive language to encourage collective responsibility and reinforce the idea that addressing food security challenges required a joint international effort. Figure 1 illustrates the temporal distribution of inclusive language across the restorative rhetoric stages, while Figure 2 shows variation in its use among the six leaders.

Qu Dongyu, Director General of the Food and Agriculture Organization (FAO), accounted for approximately fifty-seven per cent of the inclusive tweets in the dataset. This pattern reflects FAO’s coordinating mandate in global food governance, where collaborative messaging is central to institutional communication. Leaders with broader diplomatic roles, such as the United Nations Secretary General, used inclusive language less frequently but often with stronger moral emphasis. Leaders representing technical or research organizations, such as the International Food Policy Research Institute (IFPRI), used inclusive

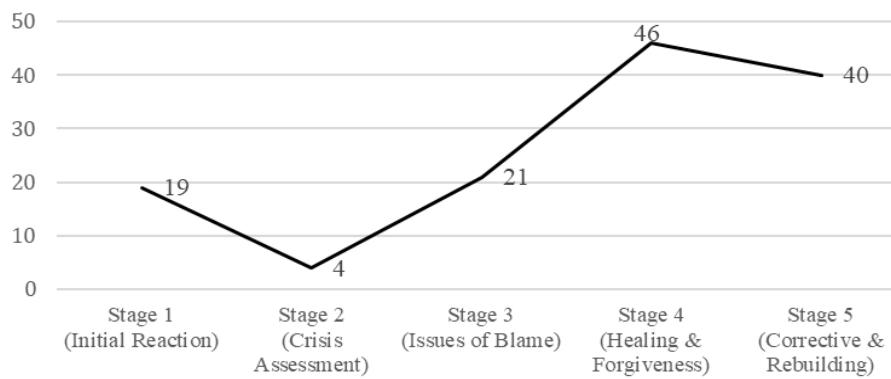


Fig. 1. Total number of inclusive language in leaders’ tweets according to restorative rhetoric stages

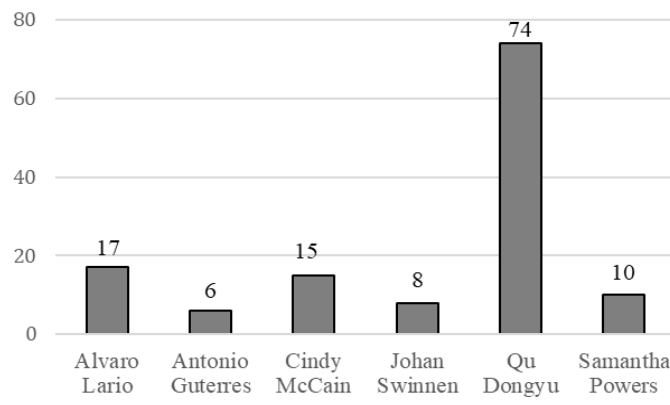


Fig. 2. Number of tweets by leaders with inclusive language according to restorative rhetoric stages.

phrasing to connect policy discussions with shared global responsibility. Across institutional roles, inclusive pronouns served three related functions: legitimising coordinating authority, distributing responsibility across international actors, and building emotional connection with global audiences. In this sense, inclusive language operates as performative inclusion, where collective rhetoric signals unity and participation while still maintaining institutional leadership during the transition from crisis response to recovery.

Examples from the dataset illustrate how inclusive language was used across different stages of the crisis. In Stage 5 (Corrective Action and Rebuilding), Qu Dongyu emphasized collective transformation of global food systems:

Example 1: Stage 5 (Corrective Action and Rebuilding)

We need to respond collectively to transform our agrifood systems for better production, better nutrition, a better environment, and a better life for all, leaving no one behind. (Qu, 16 October 2022)

The repeated use of the pronoun “we” constructs a collective identity between global institutions and the public. The phrase “leaving no one behind” reinforces the inclusive vision of shared responsibility for rebuilding food systems after the crisis. This reflects the corrective and future-oriented tone typical of Stage 5, where leaders promote long-term transformation and collective commitment to recovery.

Inclusive language also appeared earlier in the crisis when leaders framed emerging inequalities as shared global concerns. During Stage 2 (Crisis Assessment), Antonio Guterres used inclusive language to emphasise collective responsibility in addressing structural inequalities affecting food security:

Example 2: Stage 2 (Crisis Assessment)

Many rural women suffer from discrimination, systemic racism & structural poverty, despite playing a critical role in food security and nutrition. We must empower them. (Guterres, 15 October 2020)

Here, the transition from third person description to the first person plural imperative “we must” transforms the statement from observation into a shared moral obligation. Within the context of Stage 2, this form of inclusive rhetoric frames the crisis not simply as an institutional concern but as a collective responsibility that requires global action.

Example 3: Stage 3 (Issues of Blame)

Climate change is already threatening food security. How do we address the multiple tensions between consumer preferences, technological innovation, grower practices and access for all? (Lario, 8 November 2021)

The phrase “how do we address” frames the crisis as a shared responsibility rather than attributing blame to a specific actor. Within Stage 3, this inclusive framing redirects attention from fault finding toward collective problem-solving, encouraging cooperation among governments, institutions, and communities.

Inclusive language was also used by research-oriented leaders such as Johan Swinnen to connect policy dialogue with broader public engagement:

Example 4: Stage 4 (Healing and Forgiveness)

At our next @IFPRIpolicy seminar, we’ll discuss food prices & food security in MENA & LAC countries, as well as Ethiopia, Yemen, Rwanda, & Myanmar. (Swinnen, 29 March 2022)

The phrase “we’ll discuss” frames the policy conversation as a collaborative effort rather than a directive statement. In the context of Stage 4, this inclusive language reflects the restorative tone associated with rebuilding cooperation and strengthening dialogue among international partners during the recovery phase of the crisis.

These examples demonstrate how inclusive language was used across different stages of the crisis to encourage shared responsibility, promote cooperation, and frame food security challenges as a collective global concern.

Rhetorical Markers

The word cloud and the most frequently used terms shown in Figure 3 and Table 3 reveal clusters of keywords listed in Table 6. These words represent more than simple frequency counts. Instead, they form a lexical pattern that reflects a problem-to-solution narrative within the leaders’ discourse. Terms such as global and system point to the transnational and structural scale of the crisis, preparing audiences to recognise the need for multilateral coordination and policy reform. Words such as “support”, “help”, “achieve”, and “join” highlight action and participation, reinforcing ideas of collective responsibility and shared effort. Meanwhile, terms such as climate and rural draw attention to issues of risk and equity, keeping concerns about vulnerable communities visible in the discourse. The word today signals immediacy

and urgency, helping maintain momentum for near-term responses and policy decisions.

Figure 3 presents the visual representation of the word cloud, while Table 6 outlines the top 10 most frequently used terms.

Fig. 3. Word cloud generated from the rhetoric of leaders governing global food security on X



Table 6. Top 10 words identified in leaders governing global food security rhetoric

Number	Word	Total Frequency
1	global	118
2	impact	46
3	system	43
4	support	41
5	climate	41
6	help	34
7	rural	33
8	today	32
9	achieve	31
10	join	31

Leaders frequently used these rhetorical markers when framing the global scale of the crisis and its potential impacts on vulnerable populations, as illustrated in the following posts.

Example 5:

COVID-19 is a threat to food security and nutrition, especially to the most vulnerable. Without immediate action, we could soon face a massive global food emergency. (Guterres, 10 June 2020)

This post uses the markers “global” to emphasize the worldwide scale of the crisis and the potential consequences for vulnerable populations.

Example 6:

@WFP supports the world’s most vulnerable people with food assistance – and it’s those same men, women and children who will be most impacted by #COVID-19 (McCain, 6 April 2020)

The marker “impacted” highlights the

humanitarian consequences of the pandemic while reinforcing the role of international organizations in providing support.

These lexical patterns show how leaders framed the crisis in ways that emphasize collaboration, structural challenges, and long-term solutions. The rhetoric does more than describe the situation as it encourages audiences to view the crisis as a shared global problem that requires coordinated action and policy responses.

Thematic Framing

The thematic frames used by leaders evolved across the different stages of the crisis. In Stage 1, leaders emphasised urgency and vulnerability to justify the need for rapid coordination. In Stage 2, attention shifted toward the disproportionate impacts of the crisis, with calls for targeted assistance to affected populations. In Stage 3, leaders moved away from direct blame and instead framed the crisis in terms of structural accountability, linking food shortages to climate risks, conflict, and market disruptions. In Stage 4, the discourse emphasised recovery and solidarity, often accompanied by references to policy responses and programmatic solutions. By Stage 5, leaders began to articulate broader visions of climate resilient and equitable food systems. This progression suggests a deliberate rhetorical shift rather than reactive communication. The movement from immediate threat to structural diagnosis and finally to systemic reform helped expand coalitions, maintain diplomatic space, and sustain attention on long term system change.

Framing also interacted with performative inclusion. The use of inclusive language helped reduce defensiveness and made audiences more receptive to reform proposals. At the same time, structural framing avoided personalised blame that could damage diplomatic relationships. Together, these strategies allowed leaders to maintain legitimacy while gradually shifting public attention from crisis response toward long term reform. Examples of these thematic frames across the different stages are presented in Table 7.

Examples across the stages illustrate how leaders embedded food security crises within broader systemic narratives. Through these framing strategies, leaders helped explain the crisis to the public, directed attention toward key global challenges, and advocated for structural change.

Table 7. Thematic framing analysis of leaders' tweets by restorative rhetoric stage

Stage	Tweet Example	Framing Theme
Stage 1 Initial Reaction Antonio Guterres (UN)	Example 7: #COVID-19 is a threat to food security. Without immediate action, we could soon face a massive global food emergency.	Crisis urgency and vulnerability
Stage 3 Issues of Blame Qu Dongyu (FAO)	Example 8: <i>Climate crisis, ecosystem degradation & biodiversity loss threatened our agri-#FoodSystems & our food security. Our children & grandchildren will bear the greatest costs. I applaud #G20Italy & #G20RomeSummit for discussing climate & environmental action.</i>	Structural blame and system reform
Stage 5 Corrective Action and Rebuilding Alvaro Lario (IFAD)	Example 9: <i>Can we feed everyone during multiple crises while protecting the planet? I believe we can and we must. But we will only succeed if we invest in #FoodSystems and address inequalities, starting with supporting the world's rural small-scale producers.</i>	Visionary recovery

Table 8. Emotive discourse analysis of leaders' tweets by restorative rhetoric stage

Stage	Tweet Example	Emotion
Stage 2 Crisis Assessment Cindy McCain (WFP)	Example 10: @WFP supports the world's most vulnerable people. We are in this together, and it's those same men, women and children who will be most impacted by #COVID-19.	Empathy, Solidarity
Stage 4 Healing and Forgiveness Alvaro Lario (IFAD)	Example 11: At the Global Food Security Meeting hosted by @SecBlinken, it was encouraging to see how the world has come together in this time of crisis. But to achieve lasting food security, this response must be balanced with coordinated investments in resilience.	Encouragement, Reassurance
Stage 5 Samantha Power (USAID) Corrective Action and Rebuilding	Example 12: As COVID-19, climate change, & Putin wreak havoc on food systems, we must keep fighting to feed the world.	Determination, Hope

Themes such as global collaboration, policy innovation, and long term resilience appeared consistently throughout the discourse. This pattern aligns with established framing theory, which suggests that the way an issue is presented can shape how the public understands and responds to it (Entman, 1993; Iyengar, 1991). Previous research on media discourse also shows that the framing of environmental and humanitarian issues can draw public attention, influence behavioural responses, and encourage stronger institutional commitment to addressing societal challenges (Mliless & Larouz, 2020). In this way, framing supported transparency, moral leadership, and international cooperation, while reinforcing the urgency of addressing food security as a complex global concern.

Emotive Discourse

Language plays an important role in shaping how messages are interpreted, particularly during crises. Emotive language can trigger emotional responses and help build human connection. As Fadhil (2021) notes, certain words naturally convey

approval or disapproval. Terms such as “support” or “together” often signal unity, while words like “racism” or “discrimination” point to injustice and exclusion. Although emotive language was once viewed as a way of obscuring facts, it is now widely recognised in crisis communication as a strategic framing device that can shape public perception and strengthen persuasive messaging (Fadhil, 2021).

Crisis communication research also emphasises the importance of transparency in sharing factual updates while acknowledging the emotional needs of affected communities. Emotive discourse can foster empathy, reduce anxiety, strengthen relational bonds, and build public trust (Coombs, 2009; Ulmer et al., 2011). When combined with expressions of urgency, reassurance, optimism, and determination, this type of language can support recovery by humanising leadership and encouraging a sense of unity during crises. During the COVID-19 pandemic, emotive rhetoric appeared frequently in the tweets of global food security leaders. Table 8 presents examples of

how each leader incorporated emotive expressions in their crisis communication across the five stages of restorative rhetoric (Table 8).

Emotive language evolved across the different stages of the crisis. In the early stage, expressions of urgency acknowledged public fear while directing attention toward coordinated action. During the middle stages, messages of concern and solidarity recognised inequalities without shifting the discussion toward personalised blame. In the later stages, language emphasising hope and determination helped sustain commitment to longer term reforms. This pattern reflects what can be described as diplomatic emotion, where empathy is expressed in a measured way that humanizes policy while maintaining institutional credibility. Leaders avoided emotional detachment, which could distance them from the public, as well as excessive emotional appeals that might politicise the message. In this way, emotive language functioned as a governance tool, connecting with audiences while preserving authority.

In practical terms, emotive discourse helped bridge the gap between technical policy discussions and public sentiment. This connection encouraged engagement and helped sustain attention toward systemic solutions. Such communication aligns with the restorative goal of moving from crisis disruption toward collective recovery and action.

Storytelling and Temporal Narrative Coherence

This subsection examines how the six leaders governing global food security used storytelling to construct coherent narratives over time. A recurring narrative pattern appeared in their messages: “We endured X, we are doing Y, and we will achieve Z.” This three-part structure performs several rhetoric functions. It acknowledges past hardship, confirms present action, and projects hope for the future.

Such temporal coherence helped sustain attention throughout a crisis that lasted several years. It linked memory, action, and future vision into a broader restorative narrative. References to the past and present were most visible in Stages 1 to 3, where leaders emphasised urgency and justified immediate action. In contrast, present to future narratives became more prominent in Stages 4 and 5, where communication focused on recovery and long term reform. In this way, narrative time functioned as a strategic resource. It transformed

individual updates into a shared collective journey and helped maintain commitment beyond the immediate crisis phase.

The narrative structure also worked together with the other communication styles identified in the study. Inclusive pronouns positioned the public within the story being told. Emotive language added moral and emotional weight to the narrative. Thematic framing provided the causal explanations and policy direction behind the messages. Together, these elements produced a crisis narrative that appeared credible, compassionate, and oriented toward the future, reflecting the broader goals of restorative rhetoric.

Table 9 presents examples of tweets that illustrate this temporal structure. These examples show how leaders communicated across different points in time to encourage public trust, inspire hope, and frame crisis recovery as a shared global effort. Such narrative coherence helped make complex global crises easier to understand and emotionally manageable, while reinforcing leaders’ roles as credible and empathetic communicators.

The analysis of tweets across the five stages of restorative rhetoric illustrates how leaders used narrative elements such as conflict, resolution, moral appeal, and emotional tone to shape their messages on social media. These narrative strategies helped structure the communication in ways that were both meaningful and persuasive. By combining narrative logic with rhetorical intent, leaders were able to strengthen credibility, reinforce public trust, and encourage engagement. Their communication not only provided information but also helped restore hope and offer direction during a period of global uncertainty.

In response to RQ2, the analysis shows that these rhetorical strategies contributed to sustaining legitimacy and trust by framing the crisis as a shared global challenge, expressing calibrated empathy, and linking present disruptions to future recovery. Global food security leaders relied on several communication strategies on X, including inclusive language, thematic framing, emotive discourse, rhetorical markers, and temporal storytelling. The findings also indicate that leaders’ communication broadly followed the stages of the Restorative Rhetoric framework, progressing from early crisis reactions to messages focused on recovery and long-term rebuilding. This pattern suggests that

Table 9. The leaders' narratives according to temporal narrative coherence

Stage 1 – Initial Reaction (Past and Present)

Example 13:

At the Group of Friends on Food Security and Nutrition to coordinate action against #COVID-19 impact on food supply. It is clear that we need a sustained, coordinated and strategic global response, now, to prevent a global poverty and food crisis. (Lario, 17 April, 2020)

In Stage 1, the leaders' tweets use present-tense urgency paired with warnings based on past experiences.

Narrative function: The message warns about upcoming risks by linking what is happening now to what could happen soon. The time focus is short-term, but it still looks ahead.

Stage 2 – Crisis Assessment (Present)

Example 14:

Just a week ago, the #NobelPeacePrize Committee recognized the world was in trouble. When you don't have food security, you've got no security at all. (McCain, 16 October 2020)

In stage 2, the leaders' tweets focus on the immediate situation, providing analysis and identifying current needs without going into past context or long-term plans.

Narrative Function: The message aims to build credibility and make the situation clear while urging others to support ongoing efforts and respond to the urgency of the moment.

Stage 3 – Issues of Blame (Past and Present)

Example 15:

IFAD has been investing in poor rural communities for over 40 years to increase resilience, improve food security and create jobs. Resilient agricultural practices such as agro-ecology and agro-forestry can protect, sustainably manage and restore ecosystems. (Lario, 3 Sept 2021)

In Stage 3, the leaders' tweets began to use retrospective framing by looking back on shortcomings in past policies, previous collaborations (such as IFAD's 40-year involvement) and existing situational weaknesses (severe climate change, unsustainable ecosystem).

Narrative Function: The message links the food security crisis to broader challenges such as climate change. It adds moral and policy perspective, helping explain why change is needed and what steps could lead to long-term improvements.

Stage 4 – Healing and Forgiveness (Present to Future)

Example 16:

@FeedtheFuture will use new funds to do things like scale up social safety nets for families suffering from hunger made worse by the war; & tackle urgent fertilizer shortages. (Power, 25 May 2022)

In Stage 4, the leaders' tweets indicated a transitional tone, combining present-day messages of solidarity with hopeful visions for the future. Rather than focusing on past mistakes, they highlight current efforts to restore stability and offer moral support.

Narrative Function: The message builds unity and emotional strength by showing how present empathy can lead to positive change.

Stage 5 – Corrective Action and Rebuilding (Future)

Example 17

The conditions for peace & stability are very clear. It relates to hope, to having the ability to feed yourself. We need more local productions and solutions to increase #foodsecurity. (Lario, 11 November 2022)

In stage 5, the leaders crafted a rhetorical vision for a post-crisis world which involves sustainability, investment in science, technology, and innovation and also solution for long-term sustenance.

Narrative Function: The message aims to create a sense of closure by reflecting on what has been overcome for the past months or years in crisis. It seeks to inspire hope and pride, helping the public move from viewing the crisis as a moment of disruption to seeing it as a call to continued purpose.

rhetorical choices were not simply stylistic features but functioned as governance resources that helped shape public understanding during a prolonged crisis. In this context, leadership communication extended beyond delivering information. It also played a role in sustaining solidarity, reinforcing

trust, and guiding collective responses (Coombes, 2009; Ulmer et al., 2011).

In response to RQ3, two key communicative dynamics emerged from the analysis: performative inclusion and diplomatic emotion. Performative inclusion refers to the use of collective language

such as “we”, “our”, and “together” to signal unity while maintaining institutional leadership. This pattern appeared most frequently in the later stages of the crisis, when leaders emphasised collaboration, partnerships, and shared responsibility for food security. The findings suggest that inclusive rhetoric helped legitimise coordinated global action by framing the crisis response as a collective effort rather than an institutional directive. Similar patterns have been observed in crisis communication research, where inclusive language strengthens collective identity and encourages public engagement (Liu et al., 2022; Weiss et al., 2018).

Diplomatic emotion refers to a measured expression of empathy that acknowledges human suffering while preserving institutional authority. Leaders expressed concern for vulnerable populations, particularly farmers and rural communities, but avoided excessive emotional language. This balanced use of empathy helped humanise institutional communication without weakening credibility. Previous studies have shown that recognising emotional realities can strengthen public trust during crises, especially in highly visible digital communication environments (Heath, 2004; Ulmer et al., 2011).

The findings also show that thematic framing and narrative time supported these rhetorical dynamics. Leaders framed the pandemic as a structural challenge affecting global food systems, which directed attention toward systemic solutions and international cooperation. This observation is consistent with framing theory, which argues that leaders shape public interpretation of crises by highlighting particular aspects of problems and responses (Entman, 1993). Temporal storytelling reinforced this framing by linking immediate disruptions with future recovery and the transformation of food systems. By connecting present hardship with longer-term reform, leaders created narrative continuity that sustained public engagement throughout the extended crisis.

The findings indicate that rhetorical communication styles played a strategic role in global crisis governance. Through inclusive language, calibrated emotional expression, framing, and narrative continuity, leaders were able to maintain institutional authority while fostering public solidarity and participation during

a prolonged global crisis (Coombs, 2009; Ulmer et al., 2011).

These findings also carry practical implications. Organizations communicating during global crises should train leaders to use inclusive language that encourages participation while remaining transparent about institutional responsibilities. Leaders should also balance empathy with credibility so that emotional communication reflects genuine concern without appearing performative or excessive. In digital environments, rhetorical and narrative cues can help audiences better understand complex global challenges and support coordinated responses.

From a theoretical perspective, this study extends crisis communication research by demonstrating how rhetorical strategies operate in transnational digital contexts. The findings show how platform dynamics, institutional mandates, and global governance structures shape leadership communication during prolonged crises. In doing so, the study highlights how rhetorical strategies can help reconcile institutional authority with public engagement in global crisis communication (Coombs, 2009; Ulmer et al., 2011).

IV. CONCLUSION

This study shows that leadership communication in global food security crises depends not only on policy decisions but also on the strategic use of language. By examining leaders' posts on X during the COVID-19 crisis, the study demonstrates how rhetorical communication styles help sustain legitimacy, guide public understanding, and maintain trust during prolonged uncertainty.

The findings advance crisis communication research by introducing the concepts of performative inclusion and diplomatic emotion, which explain how leaders balance institutional authority with expectations for empathy and participation in digital environments. These concepts highlight the need to reconsider traditional crisis communication models that focus mainly on organizational reputation rather than on the communicative dynamics of global humanitarian governance.

Moving forward, crisis communication frameworks should better account for the role of digital platforms, transnational audiences, and evolving crisis timelines. For practitioners, the findings suggest that effective leadership

communication requires more than information delivery. Leaders must communicate with clarity, measured empathy, and inclusive framing that encourages shared responsibility while maintaining institutional credibility.

Ultimately, this research positions crisis communication as a space where authority, trust, and democracy intersect. The language of leaders has power to mobilize and to assure, but only when rhetorical strategy is matched with authentic responsiveness to human suffering and shared agency. Examining language ideology in digital discourse provides important insights into shifting linguistic attitudes and broader socio-political change. The findings of this study further illustrate how social media platforms serve as channels in which ideological positions are constructed, and language, identity, and power relations are continuously negotiated. This is further supported by the study by Elbourkhissi and Houssaini (2025), which demonstrated that Twitter discourse serves as a site for the public negotiation of language ideologies, identity narratives, and socio-political tensions surrounding language policy.

This study is limited to the analysis of posts on X from a selected group of global food security leaders during the COVID-19 crisis, and therefore does not capture audience responses or communication across other platforms. Future research should expand this work by examining audience responses, cross-platform communication, and additional leadership actors across different cultural and political contexts. Such studies would help determine whether global governance institutions can translate strategic communication into genuine legitimacy during prolonged crises where trust remains fragile.

ETHICS STATEMENTS

This study was based on publicly available data retrieved from the social media platform X (formerly known as Twitter). Only posts from

verified institutional or public leader accounts were analysed, and no private or direct messages were accessed. All data were collected in accordance with X's Terms of Service and usage policies.

Given the public nature of the content and the fact that no personally identifiable information (PII) from private individuals was used, formal ethical approval was not required. Nonetheless, the researchers exercised caution in quoting posts by paraphrasing when necessary to minimise traceability, especially in the case of public responses. The Ethics Exemption Reference Number is REC/02/2025(PG/EX/17).

This study adheres to the ethical guidelines set out by the Association of Internet Researchers (AoIR), ensuring that all data were treated with respect for privacy, context, and user expectations. The research was conducted with a commitment to academic integrity, transparency, and the responsible handling of digital content.

CREDIT AUTHOR STATEMENT

Nor Azila Hasbullah: Conceptualization, data collection and analysis, methodology, validation, original draft preparation.

Isma Noornisa Ismail: Project administration, supervision, writing, review, editing, proofreading.

Ramesh Nair: Project administration, supervision, writing, review, editing, proofreading.

ACKNOWLEDGEMENTS

This research did not receive any specific grant from funding agencies in the public, commercial, or not-for-profit sectors.

DECLARATION OF COMPETING INTERESTS

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

REFERENCES

- Abdullah, M. W. (2023). Internal governance and fraud prevention system: The potentiality of the spiritual quotient. *Journal of Governance and Regulation*, 12(4), 50–59. <https://doi.org/10.22495/jgrv12i4art5>
- Adnan, N., & Nordin, S. M. (2020). How COVID-19 effect Malaysian paddy industry? Adoption of green fertilizer a potential resolution. *Environment, Development and Sustainability*. <https://doi.org/10.1007/s10668-020-00978-6>

- Alabi, M. O., & Ngwenyama, O. (2022). Food security and disruptions of the global food supply chains during COVID-19: Building smarter food supply chains for post COVID-19 era. *British Food Journal*, 125(1), 167–185. <https://doi.org/10.1108/bfj-03-2021-0333>
- Alpisarrin, A., Panorama, M., & Maftukhatusolikah, M. (2024). Analysis of intellectual intelligence (IQ) and emotional intelligence (EQ) on employee performance with spiritual intelligence (SQ) as a mediating variable. *Journal of Asian Multicultural Research for Economy and Management Study*, 5(2), 20–30. <https://doi.org/10.47616/jamrems.v5i2.497>
- Amirian, M., & Fazilat-Pour, M. (2015). Simple and multivariate relationships between spiritual intelligence with general health and happiness. *Journal of Religion and Health*, 55(4), 1275–1288. <https://doi.org/10.1007/s10943-015-0004-y>
- Bai, Z., Schmidt-Traub, G., Xu, J., Liu, L., Jin, X., & Ma, L. (2020). A food system revolution for China in the post-pandemic world. *Resources, Environment and Sustainability*, 2, Article 100013. <https://doi.org/10.1016/j.resenv.2020.100013>
- Benoit, W. L. (1995). Accounts, excuses and apologies: A theory of image restoration strategies. *Administrative Science Quarterly*, 42(3), 548–586. <https://doi.org/10.2307/2393739>
- Benoit, W. L. (2015). Image restoration theory. In *The international encyclopedia of communication*. <https://doi.org/10.1002/9781405186407.wbieci009.pub2>
- Bierer, L. M., Bader, H. N., Daskalakis, N. P., Lehrner, A., Provençal, N., Wiechmann, T., Klengel, T., Makotkine, I., Binder, E. B., & Yehuda, R. (2020). Intergenerational effects of maternal Holocaust exposure on FKBP5 methylation. *The American Journal of Psychiatry*, 177(8), 744–753. <https://doi.org/10.1176/appi.ajp.2019.19060618>
- Brogan, W. (2020). Basic concepts of hermeneutics: Gadamer on tradition and community. *Duquesne Studies in Phenomenology*, 1(1), Article 3. <https://dsc.duq.edu/dsp/vol1/iss1/3>
- Bruns, A., & Burgess, J. (2011). The use of Twitter hashtags in the formation of ad hoc publics. *Frontiers in Pharmacology*, 13, Article 898797. <https://doi.org/10.3389/fphar.2022.898797>
- Cahyono, E., Syafitri, W., & Susilo, A. (2021). Ethnicity, migration, and entrepreneurship in Indonesia. *Journal of Indonesian Applied Economics*, 9(1), 1–12. <https://jiae.ub.ac.id/>
- Charteris-Black, J. (2018). *Analysing political speeches*. Bloomsbury Publishing.
- Chong, A. M., Lee, P. G., & Baba, M. (2015). Emotional intelligence and at-risk students. *SAGE Open*, 5(1), 1–8. <https://doi.org/10.1177/2158244014564768>
- Chow, Z. E. (2021, August 30). Food security a priority for all Malaysians. *The Star*. <https://www.thestar.com.my/news/nation/2022/08/30/food-security-a-priority-for-all-malaysians>
- Clementson, D. E. (2020). Narrative persuasion, identification, attitudes, and trustworthiness in crisis communication. *Public Relations Review*, 46(2), Article 101889. <https://doi.org/10.1016/j.pubrev.2020.101889>
- Coombs, W. T. (2009). Conceptualizing crisis communication. In R. L. Heath & H. D. O’Hair (Eds.), *Handbook of crisis and risk communication* (pp. 100–119). Routledge.
- Coombs, W. T., Frandsen, F., Holladay, S. J., & Johansen, W. (2010). Why a concern for apologia and crisis communication? *Corporate Communications: An International Journal*, 15(4), 337–349. <https://doi.org/10.1108/13563281011085466>
- Creswell, J. W. (2018). *Research design* (5th ed.). SAGE Publications.
- Croce, F. (2017). Contextualized indigenous entrepreneurial models: A systematic review of indigenous entrepreneurship literature. *Journal of Management & Organization*, 23(6), 886–906. <https://doi.org/10.1017/jmo.2017.69>
- Dana, L. P. (2015). Indigenous entrepreneurship: An emerging field of research. *International Journal of Business and Globalisation*, 14(2), 158–169. <https://doi.org/10.1504/IJBG.2015.067433>
- Devereux, S., Béné, C., & Hoddinott, J. (2020). Conceptualising COVID-19’s impacts on household food security. *Food Security*. <https://doi.org/10.1007/s12571-020-01085-0>
- Eiman, M. S. N., Aida, F. M. N. A., Mahmudiono, T., & Raseetha, S. (2021). Systematic review on

- food safety and supply chain risk assessment post pandemic: Malaysian perspective. *Frontiers in Sustainable Food Systems*, 5. <https://doi.org/10.3389/fsufs.2021.682263>
- Elbourkhisli, L., & Houssaini, K. (2025). Language policy and the pursuit of a new linguistic identity in Morocco: A critical analysis of pro-English discourse on Twitter. *Jurnal Arbitrer*, 12(3), 401–423. <https://doi.org/10.25077/ar.12.3.401-423.2025>
- Entman, R. M. (1993). Framing: Toward clarification of a fractured paradigm. *Journal of Communication*, 43(4), 51–58. <https://doi.org/10.1111/j.1460-2466.1993.tb01304.x>
- Enworo, O. C. (2023). Application of Guba and Lincoln's parallel criteria to assess trustworthiness of qualitative research on indigenous social protection systems. *Qualitative Research Journal*, 23(4), 372–384. <https://doi.org/10.1108/QRJ-11-2022-0145>
- Eskandari, F., Lake, A. A., & Butler, M. (2022). COVID-19 pandemic and food poverty conversations: Social network analysis of Twitter data. *Nutrition Bulletin*, 47(1), 93–105. <https://doi.org/10.1111/nbu.12547>
- Fadhil, Z. A. (2021). *Emotive language in political discourse: A linguistic study*. Zenodo. <https://doi.org/10.5281/zenodo.5590065>
- Fan, S., Teng, P., Chew, P., Smith, G., & Copeland, L. (2021). Food system resilience and COVID-19 – Lessons from the Asian experience. *Global Food Security*, 28, Article 100501. <https://doi.org/10.1016/j.gfs.2021.100501>
- Food and Agriculture Organization of the United Nations. (2022). *About FAO*. <https://www.fao.org/about/en/>
- Gadamer, H.-G. (2004). *Truth and method*. A&C Black.
- Gadamer, H.-G. (2017). Aesthetics and hermeneutics. In *Philosophical Hermeneutics* (pp. 95–104). Routledge. <https://doi.org/10.4324/9781351226387-11>
- Gama, B., Hariyanto, Y. W., & Hariyanto. (2024). Minangkabau ethnic survival strategy in Surakarta city. *International Journal of Law, Government and Communication*, 3(8). <https://gaexcellence.com/ijlgc/article/view/1925>
- Games, D., Agriqisthi, A., & Sari, D. K. (2020). Earthquakes, fear of failure, and wellbeing: An insight from Minangkabau entrepreneurship. *International Journal of Disaster Risk Reduction*, 51, Article 101815. <https://doi.org/10.1016/j.ijdrr.2020.101815>
- Geertz, C. (2008). Thick description: Toward an interpretive theory of culture. In T. Oakes & P. L. Price (Eds.), *The cultural geography reader* (pp. 41–51). Routledge.
- Griffin-Padgett, D. R., & Allison, D. (2010). Making a case for restorative rhetoric: Mayor Rudolph Giuliani & Mayor Ray Nagin's response to disaster. *Communication Monographs*, 77(3), 376–392. <https://doi.org/10.1080/03637751.2010.502536>
- Habermas, J. (1985). *The theory of communicative action: Vol. 1. Reason and the rationalization of society* (T. McCarthy, Trans.). Beacon Press.
- Habermas, T., & Bluck, S. (2000). Getting a life: The emergence of the life story in adolescence. *Psychological Bulletin*, 126(5), 748–769. <https://doi.org/10.1037/0033-2909.126.5.748>
- Hanani, S. (2020). Ruhana Kuddus pelopor gerakan entrepreneur perempuan di Minangkabau. *Marwah: Jurnal Perempuan, Agama dan Jender*, 19(1), 1–14. <https://doi.org/10.24014/Marwah.v19i1.8443>
- Handoko, H., Kaur, S., & Kia, L. S. (2024). Cultivating sustainability: A cultural linguistic study of Minangkabau environmental proverbs. *Jurnal Arbitrer*, 11(1), 72–84. <https://doi.org/10.25077/ar.11.1.72-84.2024>
- Handoko, H., Kaur, S., & Kia, L. S. (2025). Minangkabau oral traditions and local wisdom in disaster prediction. *E3S Web of Conferences*, 677, Article 02007. <https://doi.org/10.1051/e3sconf/202567702007>
- Hasanuddin, H. (2013). *Adat dan syarak sumber inspirasi dan rujukan nilai dialektika Minangkabau*. PSIKM.
- Hasanuddin, H. (2018). *The ethnic discourse in Indonesian multiculturalism: Adaptive dynamics of the*

Minangkabau diaspora in Bali. Erka.

- Hastuti, P. C., Thoyib, A., Troena, E. A., & Setiawan, M. (2015). The Minang entrepreneur characteristic. *Procedia - Social and Behavioral Sciences*, 211, 819–826. <https://doi.org/10.1016/j.sbspro.2015.11.108>
- Heath, R. L. (2004). Telling a story: A narrative approach to communication during crisis. In D. P. Millar & R. L. Heath (Eds.), *Responding to crisis: A rhetorical approach to crisis communication* (pp. 167–187). Routledge.
- Hochschild, A. R. (2012). *The managed heart: Commercialization of human feeling*. University of California Press.
- Hsieh, H. F., & Shannon, S. E. (2005). Three approaches to qualitative content analysis. *Qualitative Health Research*, 15(9), 1277–1288. <https://doi.org/10.1177/1049732305276687>
- Hymes, D. (1996). *Ethnography, linguistics, narrative inequality: Toward an understanding of voice* (1st ed.). Taylor & Francis. <https://doi.org/10.4324/9780203211816>
- Illouz, E. (1997). *Consuming the romantic utopia: Love and the cultural contradictions of capitalism*. University of California Press.
- Iman, D. T., & Mani, A. (2013). Motivations for migration among Minangkabau women in Indonesia. *Ritsumeikan Journal of Asia Pacific Studies*, 32, 114–123.
- Islam, M. S., Sarkar, T., Khan, S. H., Mostofa Kamal, A.-H., Hasan, S. M. M., Kabir, A., Yeasmin, D., Islam, M. A., Amin Chowdhury, K. I., Anwar, K. S., Chughtai, A. A., & Seale, H. (2020). COVID-19–related infodemic and its impact on public health: A global social media analysis. *The American Journal of Tropical Medicine and Hygiene*, 103(4), Article 20-0812. <https://doi.org/10.4269/ajtmh.20-0812>
- Iyengar, S. (1991). *Is anyone responsible? How television frames political issues*. University of Chicago Press. <https://doi.org/10.7208/chicago/9780226388533.001.0001>
- Jin, X. (2020). Exploring crisis communication and information dissemination on social media: Social network analysis of Hurricane Irma tweets. *Journal of International Crisis and Risk Communication Research*, 3(2), 179–210. <https://doi.org/10.30658/jicrcr.3.2.3>
- Johansson, E., & Johansson, K. M. (2025). Normalizing government social media communication: A Swedish case analysis. *Media and Communication*, 13. <https://doi.org/10.17645/mac.10457>
- Jungherr, A. (2015). Twitter use in election campaigns: A systematic literature review. *Journal of Information Technology & Politics*, 13(1), 72–91. <https://doi.org/10.1080/19331681.2015.1132401>
- Kaiser, M., Goldson, S., Buklijas, T., Gluckman, P., Allen, K., Bardsley, A., & Lam, M. E. (2021). Towards post-pandemic sustainable and ethical food systems. *Food Ethics*, 6(1). <https://doi.org/10.1007/s41055-020-00084-3>
- Klaus, D., Ayalew, A., Daniel, N. K., Andrii, S., Guido, L., & Hanna, Y. (2022). *Quantifying war-induced crop losses in Ukraine in near real time to strengthen local and global food security*. World Bank. <https://openknowledge.worldbank.org/handle/10986/37665>
- Laborde, D., Martin, W., Swinnen, J., & Vos, R. (2020). COVID-19 risks to global food security. *Science*, 369(6503), 500–502. <https://doi.org/10.1126/science.abc4765>
- Lai, P. E., Rosli, N. E. H. M., Pong, K. S., & Foong, S. S. (2025). Analysing JAKIM'S crisis communication strategies using image repair theory. *Journal of Communication, Language and Culture*, 5(1), 1–18. <https://doi.org/10.33093/jclc.2025.5.1.1>
- Larrauri Pertierra, I. X. (2022). Gadamer's historically effected and effective consciousness. *Dialogue*, 61(2), 261–284. <https://doi.org/10.1017/S0012217322000178>
- Lincoln, Y. S., & Guba, E. G. (1986). But is it rigorous? Trustworthiness and authenticity in naturalistic evaluation. *New Directions for Program Evaluation*, 30, 73–84. <https://doi.org/10.1002/ev.1427>
- Luo, Y., Jiang, H., & Kulemeka, O. (2015). Strategic social media management and public relations leadership: Insights from industry leaders. *International Journal of Strategic Communication*, 9(3), 167–196. <https://doi.org/10.1080/1553118X.2014.960083>

- Mika, J. P., Warren, L., Foley, D., & Palmer, F. R. (2017). Perspectives on indigenous entrepreneurship, innovation and enterprise. *Journal of Management & Organization*, 23(6), 767–773. <https://doi.org/10.1017/jmo.2018.4>
- Mishra, K., & Rampal, J. (2020). The COVID-19 pandemic and food insecurity: A viewpoint on India. *World Development*, 135, Article 105068. <https://doi.org/10.1016/j.worlddev.2020.105068>
- Mliless, M., & Larouz, M. (2020). Print media coverage of environmental issues in the COVID-19 pandemic: An ecolinguistic analysis. *Jurnal Arbitrer*, 7(2), 182–202. <https://doi.org/10.25077/ar.7.2.182-202.2020>
- Mochlasin, & Budiharjo. (2024). Islamic work ethics, local wisdom, and spirit of capitalism: Insight from a perantau Minangkabau. *Indonesian Journal of Islam and Muslim Societies*, 14(2), 289–318. <https://doi.org/10.18326/ijims.v14i2>
- Moeis, I., Febriani, R., Sandra, I., & Pabbajah, M. (2022). Intercultural values in local wisdom: A global treasure of Minangkabau ethnic in Indonesia. *Cogent Arts & Humanities*, 9(1), Article 2116841. <https://doi.org/10.1080/23311983.2022.2116841>
- Mohajan, H. (2018). *Qualitative research methodology in social sciences and related subjects* (MPRA Paper No. 85654). Munich Personal RePEc Archive. <https://ideas.repec.org/p/prapa/mprapa/85654.html>
- Mulyani, F. F., Gunartati, Ofianto, Antonia, Soriente, Yafi, R. A., Syahriani, F., Syah, M. A., & Ningsih, T. Z. (2024). Multicultural education based on Minangkabau proverbs to integrate. *Al-Ishlah: Jurnal Pendidikan*, 16(1), 526–544. <https://doi.org/10.35445/alishlah.v16i1.4989>
- Mursid, M. C., Aziz, F. A., & Anjani, D. (2024). The role of sharia economics in realizing sustainable green economic development. *Journal of Infrastructure, Policy and Development*, 8(5), 1–9. <https://doi.org/10.24294/jipd.v8i5.5012>
- Nagazumi, A. (1986). The Minangkabau coastal world in the 19th century: Rantau Pariaman. In *Indonesia in the studies of Japanese scholars* (pp. 133–154). Obor Indonesia.
- Naim, M. (2020). *Merantau pola migrasi suku Minangkabau*. Monash University. <https://doi.org/10.26180/5e3102cff142e>
- Nanda, B. J., & Permata, I. M. (2025). Synergy of government, religion, culture in urban development: Approach from the case of Pariaman City. *Asia-Pacific Journal of Regional Science*, 9(1), 107–128. <https://doi.org/10.1007/s41685-024-00365-3>
- Padilla-Meléndez, A., Plaza-Angulo, J. J., Del-Aguila-Obra, A. R., & Ciruela-Lorenzo, A. M. (2022). Indigenous entrepreneurship: Current issues and future lines. *Entrepreneurship & Regional Development*, 34(1–2), 6–31. <https://doi.org/10.1080/08985626.2021.2011962>
- Pandikar, E., Affandi, I., Disman, D., & Sundawa, D. (2022). Harmonizing economic principles, Islamic values, and entrepreneurial attitudes for a sustainable environment. *Yupa: Historical Studies Journal*, 6(2), 188–197. [suspicious link removed]
- Perumal, T., Sinayah, M., Govaichelvan, K. N., Shanmuganathan, T., & Gan, Y. C. (2024). Crisis communication through social media platforms by Malaysian Indian agencies. *Jurnal Arbitrer*, 11(4), 458–469. <https://doi.org/10.25077/ar.11.4.458-469.2024>
- Pourebrahim, N., Sultana, S., Edwards, J., Gochanour, A., & Mohanty, S. (2019). Understanding communication dynamics on Twitter during natural disasters: A case study of Hurricane Sandy. *International Journal of Disaster Risk Reduction*, 37, Article 101176. <https://doi.org/10.1016/j.ijdrr.2019.101176>
- Puspitacandri, A., Warsono, Roesminingsih, E., Soesatyo, Y., & Susanto, H. (2020). The effects of intelligence, emotional, spiritual and adversity quotient on the graduates quality in Surabaya shipping polytechnic. *European Journal of Educational Research*, 9(3), 1075–1087. <https://doi.org/10.12973/eu-jer.9.3.1075>
- Putri, E. W. (2019). Islam and local wisdom in the Minangkabau proverb. *Al-Tahrir: Jurnal Pemikiran Islam*, 19(1), 119–134. <https://doi.org/10.21154/altahrir.v19i1.1567>

- Raimi, L., Abdur-Rauf, I. A., & Ashafa, S. A. (2024). Does Islamic sustainable finance support sustainable development goals to avert financial risk in the management of Islamic finance products? A critical literature review. *Journal of Risk and Financial Management*, 17(6), Article 236. <https://doi.org/10.3390/jrfm17060236>
- Ratten, V., & Dana, L. P. (2017). Gendered perspective of indigenous entrepreneurship. *Small Enterprise Research*, 24(1), 62–72. <https://doi.org/10.1080/13215906.2017.1289858>
- Rusman, R., Daulay, Z., Danil, E., & Sofyan, S. (2023). Universal humanitarian principles of Minangkabau proverbs: A living law perspective. *Journal Research of Social Science, Economics, and Management*, 3(5), 1320–1344. <https://doi.org/10.59141/jrssem.v3i5.593>
- Saad, M. S. (2023). Emotional and spiritual quotient for sustainable education's service quality. *International Journal of Evaluation and Research in Education*, 12(4), 1781–1790. <http://doi.org/10.11591/ijere.v12i4.25434>
- Sari, F., Sapriya, Supriatna, N., Mulyadi, H., & Hasanuddin, H. (2024). Woman creativepreneurship based on Minangkabau culture. *Jurnal Arbitrer*, 11(1), 60–71. <https://doi.org/10.25077/ar.11.1.60-71.2024>
- Schreier, M. (2012). *Qualitative content analysis in practice*. SAGE Publications. <https://doi.org/10.4135/9781529682571>
- Seeger, M., & Sellnow, T. L. (2016). *Narratives of crisis: Telling stories of ruin and renewal*. Stanford University Press.
- Shovkhalov, S. (2024). Islamic economic principles and their contributions to ecological sustainability and green economy development. *E3S Web of Conferences*, 541, Article 04009. <https://doi.org/10.1051/e3sconf/202454104009>
- Silalahi, R., & Nasution, E. H. (2017). Minangkabau proverbs: Values and functions. *Advances in Social Science, Education and Humanities Research*, 141, 63–65. Atlantis Press.
- Siregar, A. M. (1969). Indonesian entrepreneurs. *Asian Survey*, 9(5), 343–358. <https://doi.org/10.2307/2642461>
- Siregar, F. A. (2022). Merantau in the ethnic tradition of Minangkabau: Local custom without sharia basis? *Samarah: Jurnal Hukum Keluarga dan Hukum Islam*, 6(1), 115–136. <https://doi.org/10.22373/sjhk.v6i1.9954>
- Skeppstedt, M., Ahltop, M., Kucher, K., & Lindström, M. (2024). From word clouds to Word Rain: Revisiting the classic word cloud to visualize climate change texts. *Information Visualization*, 23(3), 217–238. <https://doi.org/10.1177/14738716241236188>
- Subramaniam, R., Jambari, N. N., Hao, K. C., Abidin, U. F. U. Z., & Khaizura, M. R. N. (2023). Microbiological quality and safety assessment in selected HACCP-certified dine-in and hospital facilities in Klang Valley, Malaysia. *Food Control*, 148, Article 109647. <https://doi.org/10.1016/j.foodcont.2023.109647>
- Sya, M. F., Zuriyati, & Attas, S. G. (2021). The conception of community life in Petatah-Petitih Minangkabau with indigenous approach. *Jurnal Bahasa, Sastra dan Pembelajarannya*, 11(1), 1–12. <https://doi.org/10.20527/jbsp.v11i1.10559>
- Tretiakov, A., Felzensztein, C., Zwerg, A. M., Mika, J. P., & Macpherson, W. G. (2020). Family, community, and globalization: Wayuu indigenous entrepreneurs as n-cultural. *Cross Cultural & Strategic Management*, 27(2), 189–211. <https://doi.org/10.1108/CCSM-01-2019-0025>
- Triana, H. W., Oktavianus, O., Ilham, M., & Khairunnisa, A. (2023). Religious narratives during the pandemic: Transitivity analysis of COVID-19 hoax discourse on Indonesian social media. *Jurnal Arbitrer*, 10(1), 66–75. <https://doi.org/10.25077/ar.10.1.66-75.2023>
- Ulmer, R. R., Sellnow, T. L., & Seeger, M. W. (2011). *Effective crisis communication: Moving from crisis to opportunity*. SAGE. <https://doi.org/10.1016/j.pubrev.2006.11.015>
- van Dijk, T. A. (1993). Principles of critical discourse analysis. *Discourse & Society*, 4(2), 249–283. <https://doi.org/10.1177/0957926593004002006>

- van Manen, M. (2017). Phenomenology in its original sense. *Qualitative Health Research*, 27(6), 810–825. <https://doi.org/10.1177/1049732317699381>
- van Manen, M. (2023). *Phenomenology of practice: Meaning-giving methods in phenomenological research and writing*. Routledge.
- van Manen, M., & van Manen, M. (2021). Doing phenomenological research and writing. *Qualitative Health Research*, 31(6), 1069–1082. <https://doi.org/10.1177/10497323211003058>
- Vera-Burgos, C. M., & Griffin Padgett, D. R. (2020). Using Twitter for crisis communications in a natural disaster: Hurricane Harvey. *Heliyon*, 6(9), Article e04804. <https://doi.org/10.1016/j.heliyon.2020.e04804>
- Vigouroux, M. A., & Hovey, R. B. (2024). Gadamerian hermeneutics and feminist thought: Exploring preunderstandings to uncover experiences of prejudice. *International Journal of Qualitative Methods*, 23, 1–9. <https://doi.org/10.1177/16094069241278954>
- Warnke, G. (2021). *Gadamer: Hermeneutics, tradition, and reason* (A. Sahidah, Trans.). IRCISOD.
- Weber, M. (2013). *The Protestant ethic and the spirit of capitalism*. Start Publishing LLC.
- Weick, K. E. (2011). *Making sense of the organization*. Blackwell.
- Weiss, M., Kolbe, M., Grote, G., Spahn, D. R., & Grande, B. (2018). We can do it! Inclusive leader language promotes voice behavior in multi-professional teams. *The Leadership Quarterly*, 29(3), 389–402. <https://doi.org/10.1016/j.leaqua.2017.09.002>
- Williams, G. A., Woods, C. L., & Staricek, N. C. (2017). Restorative rhetoric and social media: An examination of the Boston Marathon bombing. *Communication Studies*, 68(4), 385–402. <https://doi.org/10.1080/10510974.2017.1340901>
- Zauro, Z. S., Cívín, A. S., & Bouma, O. (2024). Islamic economics for sustainable development. *Seriat Ekonomisi*, 1(2), 53–70. <https://doi.org/10.35335/ac1n5382>
- Zed, M. (2017). Approaching the maritime Southeast Asia from the margins: A tale of Muhammad Saleh, a Minangkabau West Coast merchant of the nineteenth century Sumatra. *Lensa Budaya: Jurnal Ilmiah Ilmu-Ilmu Budaya*, 12(2), 1–8. <http://journal.unhas.ac.id/index.php/jlb>
- Zwart, P. D. (2020). Globalisation, inequality and institutions in West Sumatra and West Java, 1800–1940. *Journal of Contemporary Asia*, 51(4), 564–590. <https://doi.org/10.1080/00472336.2020.1765189>